



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,543	10/18/2004	Ryuuichi Ishida	XA-10194	2315

181 7590 11/20/2006

MILES & STOCKBRIDGE PC
1751 PINNACLE DRIVE
SUITE 500
MCLEAN, VA 22102-3833

EXAMINER

ROCCA, JOSEPH M

ART UNIT	PAPER NUMBER
----------	--------------

3616

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/511,543

Applicant(s)

ISHIDA ET AL.

Examiner

Joseph Rocca

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/10/2005 and 8/16/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1 and 2** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiu et al. (U.S. 5,452,917) in view of Iida (U.S. 6,591,576). Fujiu discloses a manufacturing method of a steering column for a car in which a steering column is supported and secured on the car body through a bracket, comprising the steps of: forming in advance said bracket of a plurality of divided components (Elements 4 and 5), and connecting these plurality of divided components at the time of assembling, so as to assemble said bracket. With respect to **Claim 2**, the said divided components disclosed by Fujiu include a main body component which integrally comprises two side portions (Element 3) between which the steering column passes and which extend in parallel to the axis of the steering column, a connection portion (Element 5) connecting said side portions to each other and two flange portions extending outwardly from the upper ends of the side portions, and have a form protruding from said side portions (Figure 3, Element 3); said flange portions (Element 3) of said main body component and said divided components are provided with engagement portions (Element 5 [bottom portions]) to be engaged with each other (Figure 3, Elements 3 and 5).

Fujiu does not disclose the connection of these plurality of divided components at the time of assembling by caulking. However, Iida discloses that the use of caulking provides a cheaper alternative of manufacture rather than a welding method.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified method disclosed by Fujiu to incorporate a caulking method, so that said the engagement portions of the divided components are caulked and secured to one another to constitute said bracket. The motivation for doing so would be to decrease the expense of fabrication and manufacturing.

3. With respect to **Claim 5**, Fujiu further discloses a manufacturing method of a steering column wherein: said divided components include a main body component which integrally comprises (a) two side portions each having a first engagement portion (Figure 7, Element 4 (upper connection)) and extended in parallel to the axis of said steering column, (b) a connecting portion connecting those side portions, and (c) flange portions to be attached to the vehicle body (Figs. 3 and 7, Element 4), the flange portions having second engagement portions extended (Figure 3, Elements 3 and 5), respectively, along the sides of said steering column from said side portions; and

separate components each having a first connected to said engagement corresponding portion to be first engagement portion and (ii) a second engagement corresponding portion to be connected to said second engagement portion;

said first engagement portions of said main body component (Figure 7) and said first engagement corresponding portions of said separate components are connected to

each other, and said second engagement portions of said main body component and said second engagement corresponding portions of said separate connected to each other (Figure 3, Elements 3 and 5),

Fujiu does not disclose that the engaged portions are caulked and secured to constitute said bracket. However, Iida discloses that the use of caulking provides a cheaper alternative of manufacture rather than a welding method.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified method disclosed by Fujiu to incorporate a caulking method, so that said the engagement portions of the divided components are caulked and secured to one another to constitute said bracket. The motivation for doing so would be to decrease the expense of fabrication and manufacturing.

4. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiu et al. (U.S. 5,452,917) in view of Iida (U.S. 6,591,576). Fujiu discloses a manufacturing method of a steering column apparatus for a car in which a column-side bracket (Fig. 3, Element 5) attached to a steering column is brought into pressure contact with a body-side bracket (Fig. 3, Element 3) attached onto the body of the car to be retained, characterized in that: said column-side bracket is comprised of divided components including a main body portion which consists of a column supporting portion directly in contact with a lower part of the steering column and secured to said lower part and two side plate portions integrally formed with said column supporting portion and in pressure contact with the inner surfaces of the both side plate portions of said body-side bracket (Figure 3, Elements 3 and 4), and a fit plate portion which is formed separately from

Art Unit: 3616

said main body portion for coupling said side plate portions of said main body portion to each other (Element 5). As in Claims 1 and 2, Fujiu doesn't disclose that the main body portion and the fit plate portion are connected to each other by caulking at the time of assembling. However, Iida discloses that the use of caulking provides a cheaper alternative of manufacture rather than a welding method.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified method disclosed by Fujiu to incorporate a caulking method, so that said the engagement portions of the divided components are caulked and secured to one another to constitute said bracket. The motivation for doing so would be to decrease the expense of fabrication and manufacturing.

5. **Claim 4**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiu et al. (U.S. 5,452,917) in view of Iida (U.S. 6,591,576). Fujiu discloses a steering column apparatus for a car comprising a body-side bracket attached to the body of the car for retaining a column-side bracket (Figure 3) attached to the steering column by bringing the column-side bracket into pressure contact with two side plate portions (Figure 3, Element 3) extending in parallel to the axis of the steering column with the steering column passing there between, characterized in that: said column-side bracket (Figure 3, Element 3) is comprised of a main body portion which consists of a column supporting portion (Element 6) directly in contact with a lower part of the steering column (Element 2) and secured to said lower part and two side plate portions integrally formed with said column supporting portion (Element 6) and in pressure contact with the inner surfaces of the both side plate portions of body-side bracket (Element 3), and a fit

Art Unit: 3616

plate portion (Elements 3 and 4) which is formed separately from said main body portion (Element 6) for coupling said side plate portions of said main body portion to each other.

Fujiu does not disclose that the main body portion and the fit plate portion are connected to each other by caulking. However, Iida discloses that the use of caulking provides a cheaper alternative of manufacture rather than a welding method.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified method disclosed by Fujiu to incorporate a caulking method, so that said the engagement portions of the divided components are caulked and secured to one another to constitute said bracket. The motivation for doing so would be to decrease the expense of fabrication and manufacturing.

Examiner's Note

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Shibayana (U.S. 2004/0108704) discloses a steering column, which may be of interest to the applicant.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Rocca whose telephone number is 571-272-5191. The examiner can normally be reached on 8:30 AM to 5:00 PM, Monday through Friday.

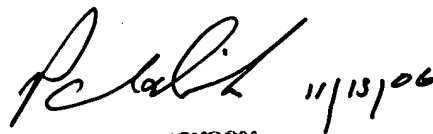
Art Unit: 3616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joseph Rocca
Patent Examiner
AU-3616



PAUL N. DICKSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600